

XNR
J. 51

EPA/530-SW-87-018

**IMPLEMENTATION STRATEGY FOR THE
HAZARDOUS WASTE TANK SYSTEM REGULATIONS**

**Permits and State Programs Division
Office of Solid Waste
U.S. Environmental Protection Agency**

May 1987

**IMPLEMENTATION STRATEGY FOR THE
HAZARDOUS WASTE TANK SYSTEM REGULATIONS**

**Permits and State Programs Division
Office of Solid Waste
U.S. Environmental Protection Agency**

May 1987

PREFACE

On July 14, 1986, the U.S. Environmental Protection Agency (EPA) promulgated amendments to the regulations under the Resource Conservation and Recovery Act (RCRA) for tank systems accumulating, storing, or treating hazardous wastes, including those owned by Federal facilities (see Appendix A). The rule requires that permitted and interim status hazardous waste tank systems, and tank systems used to accumulate hazardous waste on a generator's site for less than 90 days, be provided with secondary containment and leak monitoring. The final rule also provides for variances to the secondary containment requirements. Tank systems used to store, treat, or accumulate hazardous waste are required to undergo additional tank integrity inspections. A separate implementation strategy will address standards for accumulation tank systems operated by generators of 100-1000 kg/month who accumulate wastes on-site for less than 180 days (or 270 days if waste must be shipped over 200 miles) and who do not exceed the 6,000 kg accumulation limit.

EPA developed this Implementation Strategy (Strategy) to facilitate implementation of the regulations to achieve the maximum environmental benefits in the most expeditious manner. The Strategy is designed to serve as a plan for putting the regulations for hazardous waste tank systems into effect. The Strategy, therefore, is organized according to the major activities that will be undertaken in implementation. The authority responsible for each activity is identified, and a schedule for completing the tasks is provided.

The development of this Strategy began after the close of the comment period for the June 26, 1985, proposed rule (see Appendix B). Initially, the

development process focused on the language in the June 26, 1985, proposal. As the final rule was developed, however, the Strategy was revised to reflect the final rule. Because of the ex-parte constraints on discussing proposed rules with outside parties after the public comment period closes, this Strategy was not distributed to State workgroup members for review and comment. A final draft of the Strategy was distributed to Regional workgroup members for review and concurrence. Revisions based on Regional comments received have been incorporated into this final strategy.

Throughout the Strategy, the term "Regions/States" has been used to indicate responsibility for activities. These responsibilities can be identified as follows:

- Regions are to implement the HSWA portion of the program in all States until the State receives authorization for the HSWA provisions, and both the HSWA and RCRA portions of the program in unauthorized States until the State receives the appropriate authorization.
- States are to implement the program upon authorization for these provisions.

TABLE OF CONTENTS

	<u>Page</u>
PREFACE	
I. EXECUTIVE SUMMARY	1
II. IMPLEMENTATION STRATEGY	14
A. Regulatory Coordination/Cross-Media Impact	14
B. State Authorization under both HSWA and pre-HSWA RCRA	17
C. Technical Issues	20
D. Distribution of Information	27
E. Data Management	29
F. Permitted, Interim Status, and Accumulation Tank Systems ...	33
G. Compliance Monitoring and Enforcement	42
III. APPENDICES	
A. Rule Summary	47
B. Process Summary	54

I. EXECUTIVE SUMMARY*

The amendments to the regulations for hazardous waste tank systems establish new technical standards and other requirements for owners and operators of tank systems (see Appendix A). The following is a list of implementation priorities specific to tanks; while not all explicitly identified in the FY 1987 RCRA Implementation Plan (RIP), they are all compatible with the RIP priorities:

- a. Processing variance demonstrations for interim status facilities and 90-day accumulation tank systems;
- b. Processing permits for new facilities;
- c. Processing permit modifications; and
- d. Processing permits for facilities currently operating under interim status.

To support and implement the new regulations and these priorities effectively, this Strategy describes the major new implementation activities, outlined below, which the Regions/States need to accomplish. Headquarters' activities to support this effort, such as guidance development, are addressed in the body of the Strategy. Routine Regional/State activities, such as negotiating grants to minimize duplication of effort and tracking data and SPMS measures, also are addressed in the body of the Strategy.

The tables on pages 7 through 13 summarize these activities, as well as other activities to support implementation of the rule. Table 1 presents an overview of all activities, the responsible authorities, and the target dates for completion. Table 2 depicts the timelines for completing each activity.

* For readers unfamiliar with the July 14, 1986, regulations, it is recommended that the rule summary (Appendix A) be read in conjunction with this section.

REGION/STATE IMPLEMENTATION ACTIVITIES

Permits

a. Interim Status Facilities/New Facilities

The FY 1988 RIP indicates that all permit applications for interim status facilities are to be called in no later than May 1988. Based on available data, the Regions/States should develop a schedule for processing tank permits tailored to the phased deadlines for the design and installation of secondary containment and ensuring compliance with the 1992 deadline. Permits expected to be issued prior to the various deadlines for secondary containment, including permits for new facilities, should include conditions incorporating these requirements through reopener provisions or compliance schedules. (For use of compliance schedules, see pages 37-38.)

b. Permit Modifications

Regions/States should send letters to owners/operators of permitted hazardous waste tank systems informing them of the revised Subpart J regulations. The letters should emphasize the secondary containment requirements and address the potential need to modify the permit prior to the deadline for installation of secondary containment systems. The letters should be sent concurrent with the promulgation of the final rule deleting the requirement to obtain a permittee's agreement before modifying a permit to incorporate additional conditions based on new regulations (§270.41(a)(3) -- projected for the third quarter of FY 1987).

To determine the priorities for modifying issued permits, the Regions/States are urged to review all final RCRA tank permits and establish a schedule for initiating permit modifications. This schedule should

accommodate requests for variances from the secondary containment requirements. These permit modifications must be processed as major modifications and will require compliance with Part 124 procedures, including preparation of draft permits. It is anticipated that these permit modifications ordinarily will incorporate a schedule of compliance. (See pages 38-39.)

Demonstrations for Secondary Containment Variances

Each Region will provide the Assistance Branch, Permits and State Programs Division, with a list of handlers submitting an intent to seek a variance. (See page 37.) Under 40 CFR 265.193(h)(4), the Regions/States must provide a 30-day comment period and an opportunity for a hearing for a variance demonstration submitted by an owner/operator of an interim status facility and/or a 90-day accumulator. Regions/States must make a final determination on the variance request within 90 days of receipt of the demonstration (40 CFR 265.193(h)(5)).

For facilities that must meet the January 1989 deadline for installation of a secondary containment system, notifications of an intent to submit a demonstration for a variance were due by January 12, 1987, (40 CFR 264.193(h) and 40 CFR 265.193(h)). Completed demonstrations must be submitted by July 11, 1987, and final determinations for interim status facilities and/or 90-day accumulators must be made by October 9, 1987. Timely submittals should be processed first. Regions/States have the discretion to process late submittals; however, the regulatory deadline for installation of a secondary containment system must be met.

To determine the workload associated with these activities, as well as activities necessary to meet future deadlines, the Regions/States should review interim status tank facilities and 90-day accumulation tank systems to determine which categories in Exhibit A (page 40) are applicable. (See Compliance Monitoring and Enforcement section below and pages 42-46.)

To the extent possible, processing of secondary containment variance demonstrations should be coordinated with permit application reviews so that final determinations are made concurrently. However, where the simultaneous processing of these variance demonstrations with permit applications covering land disposal and/or incineration units will delay the final determination beyond the statutory deadlines, Regions/States should proceed with the land disposal and incineration parts of the permit and treat the variance demonstrations and applicable portions of the permit application separately as major modifications to the issued permit. Secondary containment variance demonstrations should not delay final permit determinations for land disposal facilities and incinerators.

Compliance Monitoring and Enforcement

This Strategy establishes a hierarchy of inspections and enforcement actions for hazardous waste tank systems within the priorities established by the FY 1987 RIP. To ensure that 90-day accumulation tanks are in compliance with applicable Subpart J requirements, Regions/States should focus the generator/transporter inspections on generators with 90-day accumulation tanks. (See pages 42-43.)

To the extent possible, data needed to determine which categories in Exhibit A (page 40) are applicable to interim status facilities and 90-day

accumulation tank systems should be gathered during scheduled inspections. Needed data, as well as any available documentation, include: schedule for installation of new and replacement tank systems, age of tank systems, and age of facility (determined by date of existence). This data will assist the Regions/States in determining how many variance demonstrations may be anticipated, as well as when these variance demonstrations may be received. (See pages 37, 42 and 43.)

Regions/States will undertake activities to respond to leak reports and assess the need for additional actions. Regions/States should develop procedures for receiving phone reports of leaks so that appropriate personnel are notified in a timely manner. To ensure that RCRA personnel also are notified of releases from tank systems that are initially reported to the National Response Center (NRC), under 40 CFR 302, Regions/States are encouraged to coordinate with on-scene coordinators to develop procedures for cross-communication of leak information. It is recommended that appropriate telephone numbers for leak reporting be publicized.

Because written reports describing the nature and extent of a release do not have to be submitted until 30 days after detection of a release to the environment or, under §264.56(j), within 15 days if the incident requires implementing the contingency plan, there may be significant lag time between action. Regions/States, therefore, should identify steps that can or must be taken between receipt of a phone report and receipt of a written report in order to minimize potential risk to human health and the environment. The Regions/States will be responsible for determining what responses should be ordered as a result of release reports by tank system owners and operators. Regions/States also should establish procedures for accepting and processing

both telephone and written release reports. This would include identifying personnel to handle such reports; developing a recordkeeping system to verify that written reports are received within the allowed 30 day period; and following up in cases where no written report is received. (See pages 43-45.)

Training

The amended Subpart J regulations require expertise in several areas: corrosion protection, risk-based assessments, installation, etc. Training sessions will be developed and initially presented by Headquarters. After the initial training presentations, the Regions will be responsible for delivering additional presentations. (See pages 22 and 23.)

TABLE 1
SUMMARY OF IMPLEMENTATION ACTIVITIES
FOR HAZARDOUS WASTE TANKS

Activity	Responsible Authority <u>a/</u>	Target Date
Develop a list of names and telephone numbers of the contact person(s) in the relevant offices of each Region and State	PSPD, AB (lead) OUST (assist)	January 1987
Distribute list of contacts to Regions/States (per request)	OPMS	February 1987- Ongoing
Continue sharing information between related workgroups	OSW, OUST	Ongoing
Develop a question and answer document focusing on hazardous waste tank regulations. Coordinate this effort with States	PSPD, AB (technical content) OPMS (format, organization, coordination, and administration)	July 1987- Ongoing
Send copies to Regions and States (per request) for further distribution	OPMS	August 1987- Ongoing
Work with States through grant mechanism to minimize duplication of effort	Regions	Beginning Summer 1987
Develop regulatory checklist	OSW, SPB	February 1987
Revise SCRAM to address the issue of rulemakings adopted under the authority of HSWA and pre-HSWA RCRA	OSW, SPB	June 1987

a/ See page 13 for the list of all responsible authorities and their acronyms.

TABLE 1 (continued)
SUMMARY OF IMPLEMENTATION ACTIVITIES
FOR HAZARDOUS WASTE TANKS

Activity	Responsible Authority	Target Date
Develop or update guidances to address:		
a. Revisions to the Subpart J regulations	WMD, WTB	January 1987
b. Secondary Containment Variances	WMD, WTB	March 1987
c. Closure/Post-Closure	PSPD, PB	May 1987
d. Inspections (Draft)	RED, GEB	September 1987 (May 1987)
e. Corrective Action	PSPD, PB WMD, LDB	Unscheduled
f. Clean-up Standards (Draft)	WMD, LDB	September 1987 (April 1987)
Training		
a. Develop training module for Regional staff	WMD, WTB and PSPD, AB (technical content) OPMS (organization and administration)	July 1987
b. Conduct workshops for Regional staff coordinated with other ongoing training	WMD, WTB and PSPB, AB (technical content) OPMS (organization and administration)	July 1987-Ongoing
Incorporate findings from ongoing research on tank system and leak detection technologies into existing guidance	ORD (research) WMD (coordination)	Ongoing

TABLE 1 (continued)
SUMMARY OF IMPLEMENTATION ACTIVITIES
FOR HAZARDOUS WASTE TANKS

Activity	Responsible Authority	Target Date
Provide PSPD, AB, with a list of facilities and 90-day accumulators submitting an intent to seek a variance	Regions	Ongoing
Permit Assistance Teams (PATs)		
a. PATs conduct several initial permit and variance demonstration reviews; thereafter PATs available on a request basis	PSPD, AB (lead) WMD, WTB (technical support)	January 1987-Ongoing
b. Procedural guidelines developed through PAT reviews transferred to the Regions	PSPD, AB	February 1987-Ongoing
Develop compendium of all available tank-related material; update as necessary	PSPD, AB PSPD, PB (assist)	July 1987-Ongoing
Track data on closure, corrective action, permitting, compliance and enforcement, and financial responsibility as indicated in attachment C of FY 1987 RIP	Regions/States	Ongoing
Track SPMS measures as indicated in Attachment D of the FY87 RIP	Regions/States	Ongoing
Develop procedures to ensure coordination between the SPB RCRIS representative and the implementation strategy coordinator	PSPD, SPB	May 1987
Integrate data needs of various implementation strategies with the development of RCRIS	PSPD, SPB	Ongoing

TABLE 1 (continued)
SUMMARY OF IMPLEMENTATION ACTIVITIES
FOR HAZARDOUS WASTE TANKS

Activity	Responsible Authority	Target Date
Review and make final determinations on variance demonstrations for facilities that must meet the 1/89 deadline	Regions	July 1987-October 1987
Collect data during inspections of tank systems to determine date of secondary containment installation	Regions	Ongoing
Review interim status tank facilities and 90-day accumulation tank systems	Regions	Ongoing
Process permits for new facilities	Regions	As received
Modify permits to incorporate amended tank requirements	Regions	As scheduled
Inspect tank systems and initiate enforcement actions in accordance with RIP priorities and this Strategy	Regions/States	Ongoing
Publish telephone numbers in guidance material for regulated community	Headquarters/ Regions	January 1987
Establish procedures for receiving, processing, and acting on both telephone and written release reports	Regions	June 1987

TABLE 1 (continued)
SUMMARY OF IMPLEMENTATION ACTIVITIES
FOR HAZARDOUS WASTE TANKS

Activity	Responsible Authority	Target Date
Establish procedures for information transfer between on-scene Coordinators and RCRA personnel for tank releases above CERCLA reportable quantities	Regions	June 1987
Identify steps that can or must be taken in the 30 day period between receipt of telephone and written release reports	Regions	June 1987
Monitor need to coordinate tank system reporting procedures	OSW (with contractor assistance)	Beginning January 1987-Ongoing

TABLE 2
SCHEDULE FOR IMPLEMENTATION ACTIVITIES FOR HAZARDOUS WASTE TANKS

Activity	Duration (1987)									
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
A. Regulatory Coordination	*----- Ongoing									
B. State Authorization	*----- Ongoing									
C. Technical Issues:										
1. Develop or Update Guidances	*-----*									
2. Training	*----- Ongoing									
3. Incorporate Findings From Technical Research Into Guidances	*----- Ongoing									
4. List of Facilities Submitting Variances	*----- Ongoing									
5. Permit Assistance Teams (PATs)	*----- Ongoing									
D. Distribution of Information	*----- Ongoing									
E. Data Management	*----- Ongoing									
F. Permit and Variance Request Review	*----- Ongoing									
G. Compliance Monitoring and Enforcement	*----- Ongoing									

Acronyms

AB	Assistance Branch
CEI	Compliance/Enforcement and Inspections
GEB	Guidance and Evaluation Branch
HSWA	Hazardous and Solid Waste Amendments of 1984
LDB	Land Disposal Branch
OPPI	Office of Policy, Planning and Information
OPMS	Office of Program Management and Support
ORD	Office of Research and Development
OSW	Office of Solid Waste
OUST	Office of Underground Storage Tanks
OWPE	Office of Waste Programs Enforcement
PAT	Permit Assistance Team
PB	Permits Branch
PSPD	Permits and State Programs Division
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RED	RCRA Enforcement Division
RIP	RCRA Implementation Plan
SCRAM	State Consolidated RCRA Authorization Manual
SPB	State Programs Branch
SPMS	Strategic Planning and Management System
WMD	Waste Management Division
WTB	Waste Treatment Branch

II. IMPLEMENTATION STRATEGY

This Strategy outlines the key activities for implementing the hazardous waste tank system regulations. These activities are intended to achieve the maximum environmental benefits with the available resources. Each of the seven major activities required for implementation is described below. The elements of each activity, the responsible authority, and the general schedule for completing the activities are summarized in tables following each section.

A. REGULATORY COORDINATION/CROSS-MEDIA IMPACT

This section addresses the implementation of the hazardous waste tank system rules in a manner that takes into account relevant EPA regulatory initiatives. A summary of the activities involved in regulatory coordination is listed in Table 3.

The implementation of the tank system regulations eventually will be coordinated with the implementation of other relevant RCRA regulatory programs, including the regulation of underground tanks under Subtitle I and used oil, when those programs are developed. EPA currently is developing a comprehensive program under Subtitle I to regulate underground tanks that store regulated substances. In many States, different offices have responsibility for the Subtitle C and Subtitle I programs. For example, the regulation of underground storage tanks may be the responsibility of the State fire marshall who may not have a background in or responsibility for hazardous waste regulations.

As part of the coordination effort, the Office of Underground Storage Tanks (OUST), and the Waste Management Division (WMD) developed a list of the

names and telephone numbers of contacts in the relevant offices of each Region and State. This list will be distributed to all responsible State and Regional offices by Office of Program Management and Support (OPMS) on a per request basis. Similarly, Headquarters workgroups involved with other tank system issues will continue to share information regarding their various efforts. To aid in interpreting the regulations, PSPD, AB, is developing a question and answer document focusing on the hazardous waste tank regulations. This document will be updated as necessary. The procedures used to develop and distribute the small quantity generator materials will be used to develop and distribute the tank materials. OPMS will distribute an appropriate number of copies to each Region for further distribution. States will be given the option of distributing the brochures or having the Regions distribute them.

TABLE 3
REGULATORY COORDINATION/CROSS-MEDIA IMPACT

Activity	Responsible Authority	Target Date
Develop a list of names and telephone numbers of the contact person in the relevant offices of each Region and State.	WMD, WTB (lead) OUST (assist)	January 1987
Distribute list of contacts to Regions/States (per request)	OPMS	February 1987- Ongoing
Continue sharing information between related workgroups	OSW, OUST	Ongoing
Develop a question and answer document focusing on hazardous waste tank regulations. Coordinate this effort with States.	PSPD, AB (technical content) OPMS (format, organization, coordination, and administration)	July 1987- Ongoing
Send copies to Regions and States (per request) for further distribution	OPMS	August 1987- Ongoing

B. STATE AUTHORIZATION UNDER BOTH HSWA AND PRE-HSWA RCRA

The tank system regulations were promulgated under the authority of both RCRA and the Hazardous and Solid Waste Amendments of 1984 (HSWA).² Under HSWA, EPA implements the HSWA-related standards in both nonauthorized and authorized States until a State revises its program to adopt the HSWA rules and the revision is approved by EPA. Hazardous waste tank system standards that are adopted pursuant to pre-HSWA RCRA, however, become effective on the Federal effective date only in unauthorized States. The pre-HSWA RCRA standards are not effective in authorized States until the State revises its program to adopt these standards and the revision is approved by EPA. States with existing standards may continue to administer and enforce their standards as a matter of State law.

The procedures and schedule for State program modifications are described in 40 CFR 271.21. On September 22, 1986, EPA amended §271.21 (see 51 FR 33712-33723). Authorized State programs must be revised by July 1, 1988, to reflect the tank system regulations promulgated under the authority of RCRA and by July 1, 1989, to reflect the tank system regulations promulgated under the authority of HSWA. To avoid duplication of effort, since some of the regulations were promulgated under the dual authorities of RCRA and HSWA, States are encouraged to submit one application for both RCRA and HSWA provisions by July 1, 1988.

² The Sections of the tank regulations promulgated pursuant to HSWA authority are the following: (A) all Part 264 and 265 requirements applicable to tanks owned or operated by small quantity generators (3001(d) of HSWA); (B) leak detection requirements for all new underground tanks (section 3004(o)(4) of HSWA); and (C) permitting standards for underground tanks that cannot be entered for inspection (section 3004(w) of HSWA). The final rule specifically identifies which Sections of the tank regulations are promulgated pursuant to HSWA for the categories outlined above (see Appendix A).

PSPD, State Programs Branch (SPB), developed a regulatory checklist to be used by Regional Offices and States to determine if State programs are equivalent to the Federal program. The checklist identifies: (1) which standards were proposed under authority of HSWA and which were proposed under pre-HSWA RCRA, and (2) the corresponding effective dates. The State Consolidated RCRA Authorization Manual (SCRAM) Draft, March 1986, will be revised to address the issue of rulemakings adopted under the authority of both HSWA and pre-HSWA RCRA by June 1987.

The distinction between RCRA and HSWA regulated tank systems may cause coordination problems until States are fully authorized to implement all the hazardous waste tank regulations. During the interim period, facilities may be regulated by both EPA and the State. For example, in an authorized State the owner or operator of a tank regulated under HSWA provisions and existing State rules may be required to file permit applications with both the State and Federal authorities. The dual permitting process could lead to different priorities for permit reviews and could consume resources unnecessarily.

In implementing the Federal program, EPA will work with States through the grant mechanisms to minimize duplication of effort. In those States authorized for portions of the tank permitting program, EPA will coordinate permitting efforts with the State pursuant to a Memorandum of Agreement or other EPA/State joint permitting agreement. Under HSWA, EPA retains responsibility for the issuance of HSWA permits and HSWA portions of permits until the States receive authorization for these HSWA standards. (See Section F, also.)

TABLE 4
STATE AUTHORIZATION

Activity	Responsible Authority	Target Date
Work with States through grant mechanism to minimize duplication of effort	Regions	Beginning Summer 1987
Develop regulatory checklist	OSW, SPB	February 1987
Revise SCRAM to address the issue of rulemakings adopted under the authority of HSWA and pre-HSWA RCRA	OSW, SPB	June 1987

C. TECHNICAL ISSUES

There are a wide range of technical issues associated with the new standards that will have a significant effect on implementation. The regulations establish new technical standards for permitted, interim status, and accumulation hazardous waste tank systems. These standards will place a greater demand on the availability of technical specialists for the development and installation of appropriate tank system technologies. Agency and State personnel will be required to apply the new technical standards in permit reviews, variance request evaluations, and inspections. The regulated community will be required to meet new standards for secondary containment, corrosion protection, leak testing, and continuing integrity inspections. Facility owners and operators will depend on technical specialists for assistance in areas relating to design, integrity assessments, installation certifications, corrosion protection certifications, repair and replacement certifications, and leak testing procedures. Processing of variances from the secondary containment requirements also will involve the review of highly technical, site-specific information.

EPA recognizes that proper implementation of the new standards requires that technical assistance be provided both to the regulated community and to Agency and State personnel. As a result, the Agency will provide assistance in the form of guidance, training, research reports, use of Headquarters Permit Assistance Teams (PATs), and identification of independent specialists and existing technical publications. Each of these activities is summarized in Table 5. The guidance documents, research reports, and lists discussed below will be available through established channels and will be summarized in the compendium discussed in II.D of this Strategy.

1. Guidance

WMD developed a technical guidance document that describes how to implement certain aspects of the revised tank system regulations. The guidance discusses tank system design, construction, and corrosion protection. The guidance also addresses regular inspection procedures for owners and operators and includes a checklist to assist the owners and operators in conducting their inspections. This guidance was completed in January 1987.

Since certain provisions, such as secondary containment variances, are not covered in this Subpart J guidance or other guidances, additional guidance or technical resource documents have been or will be developed as follows:

a. Variances. The regulations require the eventual installation of secondary containment for tank systems and allow owners and operators to apply for variances from these full secondary containment requirements for permitted, interim status, and accumulation facilities. WMD developed a technical resource document addressing these variance provisions (March 1987).

b. Closure/Post-Closure. The closure and post-closure guidance developed by the PSPD is being reviewed and expanded as necessary to ensure that tank closure and post-closure issues are addressed adequately. WMD, Waste Treatment Branch (WTB), is providing technical support for this activity. This guidance will be issued as final in May 1987.

c. Inspections. The RCRA Enforcement Division (RED) of the Office of Waste Programs Enforcement (OWPE) will develop inspection guidance and a checklist addressing all the revised tank requirements, including leak detection, corrosion protection, installation and design leak testing, integrity assessments, etc. This inspection guidance will be incorporated

into the Compliance/Enforcement and Inspections (CEI) guidance by September 1987, with a first draft in May 1987.

d. Corrective Action. PSPD and WMD reviewed the technical corrective action guidance being developed by the Land Disposal Branch (LDB) and determined that corrective action for tank systems is not adequately addressed. The technical corrective action guidance will be revised to address tank systems, including the issue of triggers for corrective action. The target date for this activity currently is unscheduled.

e. Clean-up Standards. WMD currently is developing guidance which addresses clean-up standards. This guidance is scheduled to be completed by September 1987 (with a draft in April 1987).

When finalized, all of these guidances and technical resource documents will be distributed to State and Regional staff by the developing offices and will be made available to the general public through the Regional offices, through the RCRA Hotline, and through established channels (GPO, NTIS, etc.).

2. Training

WMD, PSPD, and OPMS will coordinate the development and presentation of training sessions and workshops for State and Regional staffs. WMD will be responsible for the technical content of the training sessions and workshops and will develop the material for handouts, slides, etc., as necessary by July 1987. OPMS will be responsible for the organization of the training sessions and workshops and for any administrative activities incidental to presenting the sessions and workshops. The training sessions will be an ongoing activity beginning in July 1987. WMD will select the appropriate staff for conducting the sessions and workshops. This training effort will be combined with the training needs identified under several other strategies currently under

development. The training sessions and workshops will be developed as separable topic modules for ease and economy of presentation. The tank training modules will focus initially on the technical guidances for Subpart J, as well as variance reviews, and inspections. When revisions specific to tanks are made to the closure and post-closure and corrective action guidances, additional training modules may need to be developed and delivered. After the initial training presentations, beginning in July 1987, the Regions will be responsible for delivering additional presentations to State staff. Training courses also may be developed eventually for owners and operators if there is a need and the funding becomes available. However, private industry already is offering seminars and workshops on the tank system regulations.

3. Research Reports

The Office of Research and Development (ORD) is conducting ongoing research concerning tank system leak testing and leak detection technologies, and the results from these studies will supplement the guidance materials discussed above. Further research concerning specific products and technologies currently is being gathered by EPA ORD.

4. Permit Assistance Teams (PATs)

It should be noted that not many variance demonstrations are expected to be submitted. PSPD will make the PAT available to provide assistance and guidance to ensure consistency in the development of tank system permits. The PAT also will provide technical assistance on reviews of the first several variance demonstrations nationwide. Each Region will provide the PSPD, AB, with a list of handlers submitting an intent to seek a variance. The PAT will choose which demonstrations it will review based on complexity, uniqueness,

national consistency, etc. The PSPD, AB, will monitor the first several reviews and use the information gathered during these reviews to develop guidelines for conducting similar future reviews. Further support from the PAT will be available on a request basis.

TABLE 5
TECHNICAL ISSUES

Activity	Responsible Authority	Target Date
1. Develop or update guidances to address:		
a. Revisions to the Subpart J regulations	WMD, WTB	January 1987
b. Secondary Containment Variances	WMD, WTB	March 1987
c. Closure/Post-Closure	PSPD, PB	May 1987
d. Inspections (Draft)	RED, GEB	September 1987 (May 1987)
e. Corrective Action	WMD, LDB PSPD, PB	Unscheduled
f. Clean-up Standards (Draft)	WMD, LDB	September 1987 (April 1987)
2. Training		
a. Develop training module for Regional staff	WMD, WTB, and PSPB, AB (technical content) OPMS (organization and administration)	July 1987
b. Conduct workshops for Regional staff coordinated with other ongoing training	WMD, WTB, and PSPB, AB (technical content) OPMS (organization and administration)	July 1987-Ongoing
3. Incorporate findings from ongoing research on tank system and leak detection technologies into existing guidance	ORD (research) WMD (coordination)	Ongoing

TABLE 5
TECHNICAL ISSUES

Activity	Responsible Authority	Target Date
4. Provide PSPD, AB, with a list of facilities and 90-day accumulators submitting an intent to seek a variance	Regions	Ongoing
5. Permit Assistance Teams (PATs)		
a. PATs conduct several initial permit and variance request reviews; thereafter PATs available on a request basis	PSPD, AB (lead) WMD, WTB (technical support)	January 1987- Ongoing
b. Procedural guidelines developed through PAT reviews transferred to the Regions	PSPD, AB	February 1987- Ongoing

D. DISTRIBUTION OF INFORMATION

Following development of the guidance documents, research reports, lists, and other information detailed in II.C., these materials will be distributed to State and Regional staffs, the regulated community, and the general public. Distribution will be conducted through established channels (e.g., NTIS, OSWER Directives System, etc.)

The PSPD, AB, will have primary responsibility for developing a compendium of available tank-related materials. The Permits Branch (PB), PSPD, will assist in this activity. This compendium will include: the title and date of the document, the status of the document (draft, final, etc.), a summary of the document, a contact person and phone number for inquiries, and a contact person and phone number for copies of the document. This activity is scheduled for completion in July 1987. The compendium will be updated on an ongoing basis.

TABLE 6
DISTRIBUTION OF INFORMATION

Activity	Responsible Authority	Target Date
Develop compendium of all available tank-related material; update as necessary	PSPD, AB PSPD, PB (assist)	July 1987- Ongoing

E. DATA MANAGEMENT

Under the amendments to the hazardous waste tank system regulations, the Regions/States will receive a variety of data concerning tank system design, installation, operation, and closure. An Office of Solid Waste Regulatory Impact Analysis Tank Survey Data Base estimates that there are over 8,600 storage and treatment tank systems and 6,400 accumulation tank systems located throughout the country (in both authorized and unauthorized States) operated by generators of over 1000 kg/month of hazardous waste which will be subject to the Subpart J tank system regulations.³ The data that will be received from these tank system operators by Regions/States as a result of the technical requirements of the regulations include:

- Additional technical information required for Part B permit applications, including structural integrity assessments, and descriptions of new tank installation, secondary containment systems, or alternate design and operating practices;
- Requests for variances from secondary containment for storage, treatment, or accumulation tank systems;
- Reports of releases to the environment and, estimates of the extent of any releases to the environment from permitted, existing interim status, and accumulation tank systems; and
- Notification of intent to return to service a tank system that has undergone major repair.

Thus, certain data management activities will be necessary. These activities are summarized in Table 7.

Regions/States will be required to provide information to Headquarters on closure, corrective action, permitting, compliance monitoring and enforcement, and financial responsibility as indicated in Attachment C of the FY 1987 RIP.

³ ICF Incorporated and Pope-Reid Assoc., Inc., Hazardous Waste Tanks Risk Analysis Draft Report, prepared for the Office of Solid Waste, U.S. Environmental Protection Agency, March 1986, pp. 4-20 through 4-24.

Attachment D of the FY 1987 RIP indicates the Strategic Planning and Management System (SPMS) measures the Regions/States will be required to track. Certain other data elements, such as variances issued, will be tracked as a result of State-EPA Memoranda of Agreement or State grant requirements. Thus, data management activities will be needed to ensure proper tracking of the data by Headquarters, Regions, and States.

The Regions/States may want to track additional data elements to be able to demonstrate the status of a given program area, to target compliance monitoring and enforcement priorities, and to substantiate recommendations for regulatory amendments to improve program quality. Recommendations and accompanying rationales for tracking additional data elements are provided below.

1. Number of permits issued incorporating a variance; number of permits issued with no variance; and the timeframes for issuance: This data element would indicate what additional time, if any, is necessary to process tank permits with variances. This information could be used to verify workload analysis.
2. Number of variance demonstrations received based on the technology-based standard; number of variances issued based on a technology-based demonstration; number of facilities which received a technology-based variance currently under an enforcement action; and the same data elements for risk-based variances: Taken together, the data would show the ratio of demonstrations received to variances granted for both categories (technology based and risk based). This, in turn, would help to indicate how frequently each of the variance categories has been used as well as the success rate for each category. These data elements also would show the enforcement status of those facilities which received variances, which could be compared to the enforcement status of facilities operating with no variances.
3. Number of permitted facilities on a compliance schedule for secondary containment; number of facilities meeting interim milestones; number of facilities meeting final milestones; and number of facilities with compliance schedules that are under enforcement: These data elements would help to demonstrate the effectiveness and efficiency of compliance schedules.

4. Number of interim status facilities that received a variance; number of interim status facilities with a variance that currently are under an enforcement action; number of 90-day accumulators that received a variance; and number of 90-day accumulators with a variance that are under an enforcement action: These data elements would help to indicate whether these categories of facilities need additional regulation.
5. Number of permitted facilities operating without a variance; number of permitted facilities operating without a variance currently under an enforcement action; number of permitted facilities operating with a variance; and number of permitted facilities operating with a variance currently under an enforcement action: These data elements would help to indicate whether facilities with variances demonstrate a greater risk.

In addition to the above, the Resource Conservation and Recovery Information System (RCRIS) workgroup, in a draft document (May 1986) recommended the incorporation of certain data elements into RCRIS. Several of these recommended data elements, if finally incorporated, should impact favorably on the data management needs for hazardous waste tanks.

The SPB will integrate the data needs of the various strategies with the development of RCRIS. The SPB representative to the RCRIS workgroup has made data management recommendations based on the various implementation strategies. As part of this effort, SPB will develop procedures to ensure communication between the SPB's RCRIS representative and the implementation strategy coordinator (May 1987).

TABLE 7
DATA MANAGEMENT

Activity	Responsible Authority	Target Date
Track data on closure, corrective action, permitting, compliance and enforcement, and financial responsibility as indicated in attachment C of FY 1987 RIP	Regions/States	Ongoing
Track SPMS measures as indicated in Attachment D of the FY87 RIP	Regions/States	Ongoing
Develop procedures to ensure coordination between the SPB RCRIS representative and the implementation strategy coordinator	PSPD, SPB	May 1987
Integrate data needs of various implementation strategies with the development of RCRIS	PSPD, SPB	Ongoing

F. PERMITTED, INTERIM STATUS, AND ACCUMULATION TANK SYSTEMS

One of the major new provisions in the Subpart J amendments is the secondary containment requirement. Existing permitted, interim status, and 90-day accumulation tank systems must install a secondary containment system within two to fifteen years of the date of promulgation of the revised Subpart J regulations, unless they have obtained variances. If a component of a tank system without secondary containment is the source of a release, the owner/operator must provide the component of the system with secondary containment before it can be returned to service. These time-frames are based on the age of the tank system, the contents of the tank system, and the age of the facility (see Exhibit A, page 40). Secondary containment systems must be installed for all new and replacement tank systems prior to their being put into service. Variances from the secondary containment requirements may be granted if the owner/operator demonstrates: 1) that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the ground water or surface water at least as effectively as secondary containment during the active life of the tank system; or, 2) that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment (see Exhibit B, page 40). The activities necessary to implement these provisions are described below and are summarized in Table 8. The activities identified for interim status facilities will apply to 90-day accumulation tank systems, as well. Also included is a discussion of the applicability of the amended regulations and the priorities established for tanks.

1. Applicability

a. HSWA Authority/RCRA Authority

Regulations promulgated under HSWA authority are effective in both authorized and non-authorized States upon the Federal effective date. The sub-paragraphs below indicate which sections of the July 14, 1986, regulations were promulgated under HSWA authority.

- i. The following sections of the July 14, 1986 regulations are HSWA authorities when they are applied to new underground tanks (effective January 12, 1987):

- 260.10
- 262.34(a)(i)--incorporates all HSWA authorities under §265, Subpart J, which are promulgated pursuant to 3004(o)(4) and are listed under this paragraph (i)
- 264.190
- 264.192(a)(1)(i), (a)(3), (a)(4), (a)(5), and (b)-(g)
- 264.193(a)-(f), (g)(1), and (h)
- 264.195
- 265.190
- 265.192(a)(1)(i), (a)(3), (a)(4), (a)(5), and (b)-(g)
- 265.193(a)-(f), (g),(1), and (h)
- 265.195
- 270.14(b)
- 270.16
- 270.72(e)

- ii. The following sections of the regulations are HSWA authorities when they are applied as permitting standards for underground tanks that cannot be entered for inspection (effective January 12, 1987):

- 260.10
- 264.110
- 264.140
- 264.190-264.199
- 270.14(b)
- 270.16

- iii. Parts 264 and 265 requirements applicable to tank systems owned and operated by small quantity generators are promulgated as HSWA authorities (effective March 24, 1987).

Regulations promulgated under RCRA authority are effective in non-authorized States upon the Federal effective date. Regulations promulgated under RCRA authority are not effective in authorized States until the State revises its program and

the revision is approved by EPA. Authorized State programs must be revised by July 1, 1988 to reflect the tank system regulations promulgated under the authority of RCRA and by July 1, 1989 to reflect the tank regulations promulgated under the authority of HSWA.

b. Permitted Facilities

Under §270.4, compliance with a RCRA permit during its term constitutes compliance with Subtitle C of RCRA for purposes of enforcement. Therefore, unless an issued RCRA permit is modified, none of the amended tank requirements, including secondary containment, can be enforced at a RCRA permitted facility. Also, under the current §270.41(a)(3), a permit may be modified to incorporate new regulations only if the permittee agrees. On March 28, 1986, the Agency proposed to amend §270.41(a)(3) to allow the Agency to initiate modifications to a permit without first receiving a request from the permittee if statutory changes or new or amended standards affect the basis of the permit. This proposal is expected to be promulgated in final form by April 1987 (effective October 1987). Nevertheless, the permitting agency should encourage permit modifications prior to the promulgation of the amendments to §270.41(a)(3).

2. Priorities

The following is a list of priorities specific to tanks within the priorities established by the FY 1987 RIP:

- a. Processing variance demonstrations for interim status facilities and 90-day accumulation tank systems;
- b. Processing permits for new facilities;
- c. Processing permit modifications; and,

- d. Processing permits for facilities currently operating under interim status.

The following discussion describes the activities necessary to implement these amended regulations within the priorities outlined above. This discussion applies to the amended requirements promulgated under HSWA authority in both authorized and non-authorized States. The discussion also applies to the amended requirements promulgated under pre-HSWA RCRA authority in non-authorized States. States are encouraged to follow the procedures discussed below when they have received authorization for the necessary program revisions.

3. Variance Demonstrations for Interim Status Facilities and 90-Day Accumulation Tank Systems

The owner/operator of an interim status tank system or a 90-day accumulation tank system must notify EPA in writing of an intent to conduct a demonstration for a variance. For existing tank systems, EPA must be notified at least 24 months prior to the date that secondary containment must be provided. For new tank systems, EPA must be notified at least 30 days prior to entering into a contract for installation of the tank system. The demonstration must be completed and submitted to EPA within 180 days of this notification. EPA must provide a comment period (30 days) and an opportunity for a hearing for all demonstrations and must make a final determination on the variance request within 90 days of receipt of the demonstration. If the demonstration for a variance is incomplete or does not include sufficient information, the 90-day time period will begin when EPA receives a complete demonstration, including all information necessary to make a final

determination. If the public comment period is extended, the 90-day time period will be extended also.

For facilities that must meet the January 1989 deadline for installation of a secondary containment system (see Exhibit A), notifications of an intent to submit a demonstration for a variance were to be submitted by January 12, 1987. The completed demonstrations must be submitted by July 11, 1987, and final determinations must be made by October 9, 1987. These activities must be factored into FY 1987 workplans. To assist in this task, each Region will provide PSPD, AB, with a list of facilities and 90-day accumulators that have submitted an intent to seek a variance.

To budget for these activities in subsequent fiscal years, the permitting agency should review interim status tank facilities and 90-day accumulation tank systems to determine which categories detailed in Exhibit A are applicable. Since HWDMS does not contain all the data required to make this determination, additional data should be gathered during scheduled inspections. Needed data, as well as any available documentation, include: schedule for installation of new and replacement tank systems, age of tank systems, and age of facility (determined by date of existence). This data should assist the permitting agency in determining how many variance demonstrations may be anticipated, as well as when these variance demonstrations may be received.

4. Permits for New Facilities

Permits expected to be issued prior to the various deadlines for secondary containment requirements should contain conditions addressing the new tank regulations. This can be done in either of two ways. First, the permit may

include a reopener condition specific to the secondary containment requirements. When the permit is reopened to incorporate specific secondary containment conditions, the procedures in Part 124 must be followed. Second, the permit may include a compliance schedule for installation of a secondary containment system. This approach necessitates a review of the information required under §270.16(g) prior to permit issuance. It also will require tracking the activities in the compliance schedule to ensure that the activities are completed on schedule and as approved. It should not require any additional Part 124 procedures; i.e., no public comment period, etc. The use of compliance schedules is encouraged.

5. Permit Modifications

The permitting agency should initiate contact with all owners/operators of permitted hazardous waste tank systems concurrent with the promulgation of the amendments to §270.41(a)(3) in final form. The permitting agency should inform these owners/operators in writing of the revised Subpart J regulations, emphasizing the secondary containment requirements, and addressing the possible need to modify the permit prior to the deadlines for installation of secondary containment systems. For instance, permits for tank systems that fall into category 2 in Exhibit A (tank systems containing F020, F021, etc.) should be modified prior to January 1989. Permits for tank systems that are subject to the July 1994 deadline for secondary containment may not need modification if the permit expires before July 1994. To determine the priorities for permit modification, based on the categories in Exhibit A, the permitting agency should review all issued RCRA tank permits and establish a

schedule for initiating permit modifications. The schedule should accommodate requests for variance from the secondary containment requirements.

Since these modifications are major modifications, draft permits must be prepared and procedures in Part 124, or approved State procedures, must be followed. For major permit modifications, only those conditions subject to modification are reopened. It is anticipated that these permit modifications ordinarily will incorporate a schedule of compliance.

6. Permits for Facilities Currently Operating Under Interim Status

The permitting agency should not delay permits that are scheduled to be issued prior to the various deadlines for compliance with the secondary containment requirements. However, these permits must contain conditions addressing the amended tank regulations. (See discussion under paragraph 4 above.)

As indicated in the FY 1988 RIP, all call-ins must be completed by May 1988. When updating the multi-year strategies to incorporate final determinations on these permits, consideration should be given to the deadline for installation of secondary containment systems. The plans and specifications for the design and installation of the secondary containment systems could be reviewed and approved as part of the permit process. The permit then would include specific conditions covering secondary containment systems. This approach would preclude installation of unacceptable secondary containment systems and would avoid the additional cost of retrofitting a secondary containment system installed under interim status.

EXHIBIT A

Secondary containment must be provided for:

- (1) all new tank systems or components prior to their being put into service;
- (2) all existing tank systems used to store or treat EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027, within two years after January 12, 1987;
- (3) those existing tank systems of known and documented age, within two years after January 12, 1987; or when the tank system has reached fifteen years of age, whichever comes later;
- (4) those existing tank systems for which the age cannot be documented within eight years of January 12, 1987; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches fifteen years of age, or within two years of January 12, 1987, whichever comes later;
- (5) tank systems that store or treat materials that become hazardous wastes subsequent to January 12, 1987, within the time intervals required in paragraphs (1) through (4) above, except that the date that a material becomes a hazardous waste must be used in place of January 12, 1987; and,
- (6) certain leaking tank systems before they can be returned to service (see 40 CFR 264.196(e)(4)).

EXHIBIT B

Secondary Containment Variances

The hazardous waste tank regulations provide an opportunity for the owner/operator (or generator in the case of 90-day accumulation tanks) to request and receive a variance from all or part of the secondary containment requirements. To receive a variance, the owner/operator must demonstrate that:

1. Alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the ground water or surface water at least as effectively as secondary containment during the active life of the tank system

OR

2. In the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard will be posed to human health or the environment.

New underground tank systems will not be exempted from the secondary containment requirements based on a demonstration of no substantial present or potential hazard.

TABLE 8
PERMITTED, INTERIM STATUS, AND
ACCUMULATION TANK SYSTEMS

Activity	Responsible Authority	Target Date
Review and make final determinations on variance demonstrations for facilities that must meet the 1/89 deadline	Regions	July 1987 - October 1987
Collect data during inspections of tank systems to determine date of secondary containment installation	Regions	Ongoing
Review interim status tank facilities and 90-day accumulation tank systems	Regions	Ongoing
Process permits for new facilities	Regions	As received
Modify permits to incorporate amended tank requirements	Regions	As scheduled

G. COMPLIANCE MONITORING AND ENFORCEMENT

Regions/States can expect an increase in compliance monitoring and enforcement activities as a result of the amendments to the hazardous waste tank system regulations. The RCRA Implementation Plan (RIP) establishes priorities for activities necessary to implement all regulations pursuant to HSWA, including the tank system regulations. Regions and States must undertake all compliance monitoring and enforcement activities relating to tank systems according to the priorities established in the RIP. Table 9 at the end of this section summarizes these activities and target dates.

1. Compliance Monitoring

The FY 1987 RIP establishes categories of mandatory inspections, and hazardous waste tank systems may fall into one of these categories. It is likely that the majority of accumulation tank systems will fall under the generator/transporter category. The following establishes a hierarchy of inspections for hazardous waste tank systems within the priorities established by the FY 1987 RIP:

- All hazardous waste tank systems that present an immediate threat to human health or the environment must be inspected in FY 1987.
- All hazardous waste tank systems at TSD facilities owned or operated by Federal, State, or local governments must be inspected in FY 1987.
- All hazardous waste tank systems receiving CERCLA wastes must be inspected within six months prior to receiving such wastes.
- All hazardous waste tank systems at land disposal facilities should be inspected in conjunction with any land disposal inspection scheduled at the facility.
- All hazardous waste tank systems at permitted facilities must be inspected within twelve months of receiving a permit.

- All hazardous waste tank systems at hazardous waste facilities that discontinue operations must be inspected within one year after discontinuation of operations.
- Facilities with hazardous waste tank systems not inspected in FY 1986 must be inspected in FY 1987. Tank systems inspected under items 1 through 6 above would count toward the biannual target.
- Generators who accumulate hazardous wastes in tanks for 90 days or less also must comply with the secondary containment requirements within the timeframes listed in Exhibit A (page 40). Permits will not be required for these tank systems. To ensure that 90-day accumulation tanks are in compliance with applicable Subpart J requirements, Regions and States could focus the mandatory generator/transporter inspections on generators with 90-day accumulation tanks.

2. Enforcement Actions

The FY 1987 RIP also emphasizes the need to initiate enforcement actions in response to certain violations. The following establishes a hierarchy of enforcement actions for hazardous waste tank systems within the priorities established by the FY 1987 RIP:

- Actions are to be brought against owners and operators of tank systems that have releases which present serious threats to human health or the environment.
- Enforcement authority is to be used to obtain corrective action as appropriate, to obtain data needed to make corrective action decisions, and to compel interim measures when warranted.
- Actions are to be brought against owners and operators of tank systems in order to ensure compliance with permit requirements, closure plans and financial assurances.
- Criminal enforcement is to be brought against owners and operators of tank systems who dispose illegally.

3. Leak Reporting

In addition to applying the RIP compliance monitoring and enforcement priorities to tank systems, Regions/States will undertake additional activities to respond to leak reports and assess the need for corrective actions. Any release to the environment must be reported within 24 hours of

its detection. Reports to the NRC (National Response Center) made pursuant to 40 CFR 302 in response to releases of a hazardous waste in a quantity greater than its CERCLA reportable quantity (RQ) will satisfy this requirement. A leak or spill of hazardous waste that is less than or equal to a quantity of 1 pound and that is immediately contained and cleaned up is exempted from the notification and reporting requirements.

Regions/States should develop procedures for receiving phone reports of leaks so that appropriate personnel are notified in a timely manner. To ensure that RCRA personnel also are notified of releases from tank systems that are initially reported to the NRC under 40 CFR 302, Regions/States should coordinate with on-scene coordinators (OSCs), whom the NRC subsequently notifies, to develop procedures for cross-communication of leak information. If Regions/States have established phone systems under other statutes (e.g., the Clean Air Act or the Clean Water Act), they could modify these systems to receive tank release notifications and related inquiries. If a large volume of calls is received, the Agency will consider taking measures to coordinate tank system reporting procedures with the reporting procedures under CERCLA. In this way, all releases from tank systems would be reported to the NRC, regardless of RQ. Appropriate telephone numbers for leak reporting will be publicized in the educational materials developed for the regulated community in order to encourage and facilitate compliance with leak reporting requirements. Regions/States also may encourage trade and industrial associations or tank manufacturers to publicize leak reporting telephone numbers.

Because written reports describing the nature and extent of a release do not have to be submitted until 30 days after detection of a release to the

environment or, under §264.56(j), within 15 days if the incident requires implementing the contingency plan, there may be significant lag time between notification and receipt of a written assessment. Regions/States should identify steps that can or must be taken between receipt of a phone report and receipt of a written report in order to minimize potential risk to human health and the environment. The Regions/States will be responsible for determining whether additional actions should be ordered as a result of release reports by tank system owners and operators. As discussed in II.C, EPA Headquarters reviewed the technical corrective action guidance being developed by the LDB and determined that tank-specific guidelines need to be developed. The technical corrective action guidance will be revised to address tank systems, including the issue of triggers for corrective action (currently unscheduled).

Regions/States also must establish procedures for accepting and processing both telephone and written release reports. This would include identifying personnel to handle such reports; developing a recordkeeping system to verify that written reports are received within the allowed 30 day period; and following up in cases where no written report is received.

TABLE 9
COMPLIANCE MONITORING AND ENFORCEMENT

Activity	Responsible Authority	Target Date
Inspect tank systems and initiate enforcement actions in accordance with RIP priorities and this strategy	Regions/ States	Ongoing
Publish telephone numbers in guidance material for regulated community	Headquarters/ Regions	January 1987
Establish procedures for receiving, processing, and acting on both telephone and written release reports	Regions	June 1987
Establish procedures for information transfer between on-scene coordinators and RCRA personnel for tank releases above CERCLA reportable quantities	Regions	June 1987
Identify steps that can or must be taken in the 30 day period between receipt of telephone and written release reports	Regions	June 1987
Monitor need to coordinate tank system reporting procedures	OSW (with contractor assistance)	Beginning January 1987- Ongoing

APPENDIX A

RULE SUMMARY

On July 14, 1986, EPA amended the regulations under the Resource Conservation and Recovery Act for tank systems that accumulate, store, or treat hazardous waste (51 Federal Register 25422, July 14, 1986). These rules establish technical standards and operating procedures for small quantity generator, less than 90-day accumulation, interim status, and permitted hazardous waste tank systems. The owners and operators ("o/o") are subject to the following procedures and requirements (under 40 CFR Parts 264 and 265).

I. INTERIM STATUS AND PERMITTED TANK SYSTEMS

Existing Tank Systems

An "existing tank system" or "existing component" is a tank system or component that was handling hazardous waste or for which installation had commenced on or prior to 7/14/86. This definition should not be confused with the definitions in §260.10 for "existing facility" or "existing portion" and the date identifying interim status.

- Existing tank systems that do not have secondary containment must undergo an assessment by 1/12/88 that attests to the system's integrity. The assessment must:
 - a) be reviewed and certified by an independent, qualified, registered professional engineer;
 - b) determine that the system is adequately designed and has sufficient structural strength and is compatible with stored or treated waste; and,
 - c) be conducted within 12 months after the date the waste becomes hazardous.

- If, as a result of the assessment, the tank is deemed to be unfit for use, the owner/operator must comply with §265.196.
- Until secondary containment is installed, interim status tank systems and all ancillary equipment must undergo integrity testing at least annually. Integrity tests for permitted tank systems will be conducted according to the schedule specified in the permit.
- Records of integrity and corrosion protection assessments must be maintained at the facility.
- Secondary containment systems must be provided per the schedule in §§264.193(a) and 265.193(a), except for: (1) tanks used to store or treat hazardous wastes without free liquids that are inside a building with an impermeable floor; and, (2) tanks that serve as part of a secondary containment system. Secondary containment systems must be designed, using minimum standards (§§264.193(b)-(f) or 265.193(b)-(f)), to detect and contain any release.
- An owner/operator may be granted a variance from the secondary containment requirements if the Regional Administrator finds that the design or operation of the tank system together with its location characteristics will prevent the migration of hazardous wastes into the ground water or surface water, or that, in the event of a release, no substantial present or potential hazard will be posed to human health and the environment. To grant/be granted a variance:
 - a) the o/o must notify of its intent to submit a demonstration for a variance 24 months prior to the date secondary containment is required;
 - b) the o/o must complete the demonstration within 6 months of the notification; and,
 - c) for interim status facilities, the Regional Administrator must notify the public, allow for a 30-day comment period, provide an opportunity for a hearing, and approve or disapprove the request in 90 days.
- General operating requirements must be met regarding compatibility of waste with the tank system, and spill and overflow prevention.
- Daily inspections are required for above-ground portions of tank systems, data gathered from monitoring and leak-detection equipment, and the construction materials and area immediately surrounding the tank systems.

- Proper operation of cathodic protection systems must be confirmed within six months after an initial installation and annually thereafter. Sources of impressed current must be inspected bimonthly.
- Owners/operators must follow procedures for responding to spills or leaks from tank systems that release hazardous waste or constituents to the environment. These procedures include notification of leaks and certification of repair.
- At closure of the tank systems, the o/o must remove contaminated materials from the tank area or, if such removal is not possible, the owner/operator must follow closure and post-closure care requirements for landfills.
- Owners/operators must observe special requirements for ignitable, reactive, or incompatible waste.
- In addition to performing the waste analysis required by §265.13, the o/o must perform additional waste analysis and trial tests when an interim status tank system is used to treat or store a hazardous waste that is different than waste previously treated or stored, or a substantially different treatment process is used.

New Tank Systems

A "new tank system" or "new tank component" is a tank system or component that will be used to store hazardous waste and for which installation has commenced after 7/14/86. This definition should not be confused with the definition in §260.10 of a "new facility" and the date identifying interim status.

- For new tank systems, the o/o must obtain, and submit to the Regional Administrator at the time of submission of the Part B information, an assessment of tank system integrity, and acceptability for storing and treating hazardous waste including a determination by a corrosion expert. The corrosion expert must assess the corrosion potential and the type and degree of corrosion protection that may be needed for new metal tank systems (or any external metal component of the tank system) in contact with soil or water.
- New tank systems must be designed to account for proper foundation, anchorage to prevent flotation, frost heave, and vehicular traffic passing over underground systems.

- New tank systems must be installed properly and the installation and system components inspected by a qualified specialist. Certifications must be kept on file.
- New tank systems or components placed underground must be backfilled with a noncorrosive, porous, homogeneous substance.
- Secondary containment systems that meet the requirements of §§264.193(b)-(f) and 265.193(b)-(f) must be provided for all new tank systems prior to putting the tank systems into service.
- An owner/operator may be granted a variance from the secondary containment requirements if the Regional Administrator finds that the design or operation of the tank system, together with its location characteristics, will prevent the migration of hazardous waste into the ground water or surface water, or that, in the event of a release, no substantial present or potential hazard will be posed to human health and the environment. New underground tank systems are not eligible for a variance. To be granted a variance:
 - a) the o/o must notify its intent to submit a demonstration 30 days prior to entering into a contract to install a new tank system;
 - b) the o/o must complete the demonstration within 6 months of the notification; and,
 - c) for interim status facilities, the Regional Administrator must notify the public, allow for a 30-day comment period, provide opportunity for a public hearing, and approve or disapprove the request in 90 days.
- Until a secondary containment system is installed, interim status tank systems and all ancillary equipment must undergo integrity testing at least annually. Integrity tests for permitted tank systems will be conducted according to the schedule contained in the permit.
- Integrity and corrosion protection assessments must be maintained at the facility.
- General operating requirements must be met regarding compatibility of wastes with the tank system, and spill and overflow prevention.
- Daily inspections are required for above-ground portions of tank systems, data gathered from monitoring and leak-detection equipment, and the construction materials and stems immediately surrounding tank systems.

- Proper operation of cathodic protection systems must be confirmed within six months after initial installation and annually thereafter. Sources of impressed current must be inspected bimonthly.
- Owners/operators must follow procedures for responding to spills or leaks from the tank systems that release hazardous waste or constituents to the environment. These procedures include notification of leaks and certification of repair.
- At closure of the tank systems, the o/o must remove contaminated materials from the tank area or if such removal is not possible, the o/o must follow closure and post-closure care requirements for landfills.
- Owners/operators must observe special requirements for ignitable, reactive, or incompatible waste.
- In addition to performing the waste analysis required by §265.13, the o/o must perform additional waste analysis and trial tests when an interim status tank system is used to treat or store a hazardous waste that is different than waste previously treated or stored, or a substantially different treatment process is used.

II. LESS THAN 90-DAY ACCUMULATION TANK SYSTEMS

Generators may accumulate hazardous waste less than 90 days provided that they:

- 1) comply with Part 265 Subparts C, D, and J (except §§265.197(c) and 265.200) and §265.16. Generators need not comply with Part 265 Subparts G and H (as required in §265.197), except with §§265.111 and 265.114;
- 2) mark on the tank the date accumulation began;
- 3) label the tanks "hazardous waste."

Note: 262.34(b) allows the Regional Administrator to grant a 30-day extension.

III. SMALL QUANTITY GENERATORS (of between 100 and 1,000 kg/month)

Generators may accumulate hazardous waste for up to 180 days (or 270 days if the TSDF is more than 200 miles away), provided:

- 1) the total amount accumulated is less than 6,000 kilograms;
- 2) the generator complies with Part 265, Subpart C, §265.201, and special requirements for contingencies at §262.34(d)(5);
- 3) the date of starting accumulation is marked on the tank and is visible for inspection; and
- 4) the tank is labeled "hazardous waste."

Generators who accumulate more than 6,000 kilograms of hazardous waste on-site at any one time or store hazardous waste on-site for more than 180 days (or 270 days) (except for 30 day extensions granted by the Regional Administrator) are subject to permitting requirements and must comply with revised Parts 264, 265, and 270.

IV. APPLICABILITY

The sub-paragraphs below indicate which sections of the July 14, 1986, regulations were promulgated under HSWA authority.

- i. The following sections of the July 14, 1986 regulations are HSWA authorities when they are applied to new underground tanks (effective January 12, 1987):

260.10

262.34(a)(i)--incorporates all HSWA authorities under §265, Subpart J, which are promulgated pursuant to 3004(o)(4) and are listed under this paragraph (i)

264.190

264.192(a)(1)(i), (a)(3), (a)(4), (a)(5), and (b)-(g)

264.193(a)-(f), (g)(1), and (h)

264.195

265.190

265.192(a)(1)(i), (a)(3), (a)(4), (a)(5), and (b)-(g)

265.193(a)-(f), (g), (1), and (h)

265.195

270.14(b)

270.16

270.72(e)

- ii. The following sections of the regulations are HSWA authorities when they are applied as permitting standards for underground tanks that cannot be entered for inspection (effective January 12, 1987):
 - 260.10
 - 264.110
 - 264.140
 - 264.190-264.199
 - 270.14(b)
 - 270.16
- iii. Parts 264 and 265 requirements applicable to tank systems owned and operated by small quantity generators are promulgated as HSWA authorities (effective March 24, 1987).

APPENDIX B

PROCESS SUMMARY

The Agency developed this Implementation Strategy in three phases. The Phase I report of April 4, 1986, identified and briefly analyzed the key implementation issues that must be resolved to implement the hazardous waste tank system regulations. The Phase II report of April 30, 1986, further analyzed the implementation issues and evaluated the pros and cons of various options for resolving each issue. The issues and options identified in these reports were reviewed by State, EPA Regional, and EPA Headquarters staff. The comments and suggestions provided by the various staff were analyzed and incorporated into the Draft Implementation Strategy, as appropriate.

The development of this document began after the close of the comment period for the June 26, 1985, proposal. Phases I and II were developed based on the June 26, 1985, proposal. This Implementation Strategy was developed to coincide with language in the final regulation and input from the workgroup. Because of the ex-parte rule, the Strategy was commented on and reviewed by only the EPA representatives on the workgroup. A final draft of the Strategy was distributed to Regional workgroup members for review and concurrence. Revisions based on Regional comments received have been incorporated into this final Strategy.